

5.15 inclusive; paragraph 5.16 for a davit-launched inflatable liferaft; and paragraph 5.17, a prototype inflatable liferaft of each design submitted for Coast Guard approval must meet the additional specific requirements and tests specified in paragraphs (c) and (d) of this section.

(b) The Commandant may waive certain tests for a liferaft identical in construction to a liferaft that has successfully completed the tests, if the liferafts differ only in size and are of essentially the same design.

(c) Tests must be conducted in accordance with the indicated paragraphs of IMO Resolution A.689(17), except:

(1) *Jump test (Paragraph 1/5.2)*. One-half of the jumps must be with the canopy erect, and the remainder with the canopy furled or deflated. If a “suitable and equivalent mass” is used, it must be equipped with the shoes described in paragraph 1/5.2.1 of Resolution A.689(17), and arranged so the shoes strike the liferaft first.

(2) *Mooring-out test (Paragraph 1/5.5)*. Initial inflation may be with compressed air.

(3) *Loading and seating test (Paragraph 1/5.7)*. For a liferaft not intended for use with a launching or embarkation appliance, the persons used to determine seating capacity shall wear insulated buoyant immersion suits rather than lifejackets.

(4) *Boarding test (Paragraph 1/5.8)*. This test must be performed using each boarding ramp or boarding ladder which is installed on the liferaft.

(5) *Canopy-closure test (Paragraph 1/5.12)*. This test is required only for SOLAS A and SOLAS B inflatable liferafts. For a davit-launched liferaft, any opening near the lifting eye should be sealed during the test to prevent the ingress of water. The water accumulated within the liferaft at the end of the test must not exceed 4 liters (1 gallon).

(6) *Detailed inspection (Paragraph 1/5.14)*. The independent laboratory’s inspection of the prototype liferaft under § 160.151-13(a) satisfies the requirements of paragraph 1/5.14.

(7) *Davit-launched liferafts—strength test (Paragraph 1/5.16.1)*. The calculation of combined strength of the lifting

components must be based on the lesser of—

(i) The lowest breaking strength obtained for each item; or

(ii) The component manufacturer’s ultimate strength rating.

(d) The boarding ramp on each liferaft equipped with one must be demonstrated capable of supporting one person weighing 100 kg (220 lb), sitting or kneeling and not holding onto any other part of the liferaft.

§ 160.151-29 Additional approval tests for SOLAS A and SOLAS B inflatable liferafts.

To verify compliance with the requirements of Regulation III/39.5.1, the following test must be conducted for SOLAS A and SOLAS B inflatable liferafts in addition to those required by § 160.151-27 and IMO Resolution A.689(17):

(a) *Test of filling time for stability appendages*. A representative sample of each type and size of stability appendage to be fitted to a liferaft must be tested as follows:

(1) The appendage must be attached to a testing jig similar in material and construction to the appendage’s intended location on a liferaft. The method of attachment must be the same as used on a liferaft. The appendage and jig must be attached to a scale capable of recording peak readings, and suspended over a pool of calm water. The dry weight must be recorded.

(2) The appendage and jig must then be quickly lowered into the water until the appendage is completely submerged. When the appendage has been in the water for 25 seconds, it must be smoothly lifted completely out of the water, and the peak weight after the appendage is removed from the water recorded.

(3) The difference in weights measured according to paragraphs (a) (1) and (2) of this section must be at least 60 percent of the appendage’s volume, calculated in accordance with § 160.151-17(a)(2)(i).

(b) [Reserved]

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